1: McGee E-5 (1894-1895)1898 NU31 Seri NU31

one of the huts. The condition of the remains and the various indications connected with the rancheria corroborated the tradition that the great creature had afforded unlimited and acceptable food for many moons; and various expressions of the tradition indicated that the event, though the most memorable of its class, was not unique in Seri lore.

A few bones and fragments of skin of the seal were found in and about the rancherias on Isla Tiburon, and an old basket rebottomed with sealskin was picked up in a recently abandoned jacal on Rada Ballena; a few bones provisionally identified with the porpoise (which haunts Boco Infierno in shoals) were also found amid the refuse about the old rancheria at the base of the long sand-spit terminating in Punta Tormenta; but nothing was learned specifically concerning the chase and consumption either of these animals or of the abundant sharks from which the island is named.

FIG. 21.—Fish-spearhead.

Among the exceedingly limited food supplies brought from the coast by the Seri group at Costa Rica in 1894, were rank remnants of partly desiccated fish, usually gnawed down to heads and tails; and Maahém and others spoke of fish as a habitual food, while Señor Encinas regarded it as the principal element of the tribal dietary. The harder bones and heavier scales of several varieties of fish were also found abundantly among the middens of both mainland and Tiburon shores in 1895. None of the remains bore noticeable traces of fire; and all observations, including those of Señor Encinas, indicate that the smaller varieties of fish are habitually eaten raw, either fresh or partially dried, according to the state of appetite at the time of taking—or the condition of finding when picked up as beach flotsam. But a single piscatorial device was observed, i. e., the barbed point and foreshaft, shown in figure 21—the iron point being, of course, accultural, and probably obtained surreptitiously. This harpoon, which measures 6 inches in length over all, is designed for use in connection with the main shaft of a turtle-catching tackle; and it is evidently intended for the larger varieties, perhaps porpoises or sharks. In 1827 Hardy observed a related device:

> They have a curious weapon which they employ for catching fish. It is a spear with a double point, forming an angle of about 5°. The insides of these two points, which are 6 inches long, are jagged, so that when the body of a fish is forced between them, it can not get away on account of the teeth.[1]

Don Andrés Noriega, of Costa Rica, described repeatedly and circumstantially a method of obtaining fish by aid of pelicans, in which a

[1] Travels, p. 220.

1: McGee E-5 (1894-1895)1898 NU31 Seri NU31

young or crippled fowl was roped to a shrub or stone, to be fed by his fellows; when at intervals a youth stole out to rob the captive's pouch. At first blush this device would seem to rise above the normal industrial plane of the Seri and to lie within the lower stages of zoeculture, like the cormorant fishing of China if not the hawking of medieval Europe; yet on the whole it may be deemed fairly consistent with that cruel yet mutually beneficial toleration between tribesmen and pelicans attested by the preservation of the avian communal, as already noted. Moreover, Don Andrés observations are in accord with early notes of the exceedingly primitive aborigines of California, from whom the Seri have undoubtedly borrowed various cultural suggestions; thus Venegas quotes Padre Torquemada as saying:

> I accidentally found a gull tied with a string and one of his wings broke. Around this maimed bird lay heaps of excellent pilchards, brought thither by its companions; and this, I found, was a stratagem practiced by the Indians to procure themselves a dish of fish; for they lie concealed while the gulls bring these charitable supplies, and when they think that little more is to be expected they seize upon the contributions.

The padre says also of these gulls that "they have a vast craw, which in some hangs down like the leather bottles used in Peru for carrying water, and is it they put their captures to carry them to their young ones"—from which it is evident that he refers to the pelican. Venegas adds, "Such are the mysterious ways of Providence for the support of his creatures!"[1] And in the margin of his accompanying "Mapa de la California", he introduces a vigorous picture of a captive fowl, its free fellow, and the mess of fish, the cut being headed "Alcatrazes" (pelicans).

Despite these devices, the dearth of fishing-tackle among the Seri is evidently extreme. Save in the single specimen figured, no piscatorial apparatus of any sort was found among the squalid but protean possessions at the Costa Rica rancheria; neither nets nor hooks nor rods nor lines nor any other device suitable for taking the finny game were found in the scores of jacales containing other artifacts on Tiburon; while Señor Encinas was conversant only with the simple method of taking fish by hand from the pools and shallows left by receding breakers or ebbing tides. This dearth of devices is significantly harmonious with other Seri characteristics: it accords with the leading place assigned the turtle in their industry and their lore; it is in harmony with that primitive and nonmechanical instinct which leads them to rely on bodily strength and skill and swiftness rather than on extracorporeal artifacts in their crude and incomplete conquest of nature; and it is a manifest expression of relation with their distinctive physical environment—for the ever-thundering breakers of their gale-swept coast are abundant, albeit capricious, bringers of living grist, while the offshore gales at low tide lay bare hundreds of acres of shoaler

[1] History of California, 1759, vol. 1, p. 61.

1: McGee E-5 (1894-1895)1898 NU31 Seri NU31

bottoms literally writhing with fishes stranded among beds of mollusks, and slimy with the abounding plankton of a fecund coast. The region is one of ample, albeit lowly, food supply, where every experience tends toward inert reliance on providential chance, and where the stimulus of consistently conscious necessity seldom stirs the inventive faculty.

Closely connected with fish as a Seri food-source are the various molluscan and crustacean forms collectively called shellfish; and these contribute a considerable share of the sustenance of the tribe.

Apparently the most important constituent of this class of foods is the Pacific coast clam, which abounds in the broad mud-flats bordering Laguna La Cruz and other lagoons of Seriland, and which was still more abundant during a subrecent geologic epoch, to judge from the immense accumulation of the shells in Punta Antigualla. The clams are usually taken at low tide, without specialized apparatus. They are located by feeling with the feet in shallow water, and caught either with toes or with fingers, to be tossed into any convenient receptacle. When the water is entirely withdrawn from the flats, they are located by means of their holes, and are extricated either with a shell-cup or with some other improvised implement. Frequently the entire mess is thrown into a fire until the shells open, when they are withdrawn and the mollusks devoured practically raw; perhaps more commonly the shells are opened by blows of the hupf, and eaten without semblance of cooking; and, except on the surface, no trace of roasting was found among the vast accumulations of shells in Punta Antigualla.

Perhaps second to the clam in frequency of use is the local oyster, which abounds about the more sheltered shores of Tiburon. It is gathered with the hands, aided perhaps by a stone or stick for dislodging the shells either from the extended offshore beds at extreme low water, or from the roots of a mangrove-like shrub at a medium stage. The shells, like those of the clam, are frequently opened by partial roasting; and shells, sometimes scorched, are extensively scattered over the interior, indicating that the oyster is a favorite portable food. The popularity of this bivalve is shared by the Noah's-ark (*Arca*), to which some mystical significance is apparently ascribed; and the abundant limpets and bivalves and other mollusks are eaten indiscriminately, to judge from the abundance of their shells in the middens. The ordinary crab, too, is a favorite article of food, and its claws are numerous in camp and house refuse; while the lobster-like deep-water crab is introduced into the menu whenever brought to the surface by storms, as shown by its massive remains in the middens.

On the whole, shellfish form a conspicuous factor in Seri economy by reason of the considerable consumption of this class of food; but, viewed in the broader industrial aspect, the produce is notably primitive, and significant chiefly as indicating the dearth of mechanical and culinary devices.

2: Kroeber E-5 (1930) 1931 NU31 Seri NU31

sounds like an expectable enough mythic idea, but seems involved with McGee's dubious conceptions as to totemism, discussed below. 114 193

The two-pointed fish-spear, with serrated points 6 inches long and spreading 5", seen by Hardy (McGee, p. 193), is interesting because seemingly unreported in or near the area. 114 227

"Fishing" with staked pelicans who are then fed by free birds, is authenticated by the statement of Venegas for lower California, (McGee, p. 193). [226 231]

No fish nets, hooks, or lines were seen by McGee among the abandoned effects on Tiburon (p. 194). This is in accord with my observation. The abundance of sharks may interfere with net or deep water fishing.

The bow (p. 200) is of *palo blanco;* the release (pls. 28, 29), Mediterranean; the archer's position (pl. 29), with elbow above head, suggests a quick downward shot at a target or game lying on the ground not far away. 114 411

Mesquite, according to McGee (p. 207), is ground on the metate. Sr. Thomson told me of its being pounded in a hole in the ground. The Seri gave me the name a'kata for what I understood to be this earth mortar. According to Sr. Thomson's description, the flour from the first beans cakes and lines the cavity firmly, so that the bulk of the material is secured quite cleanly. In general, mesquite is mortar-pounded rather than metate-ground by the tribes from whom we have records, as is expectable from the woody nature of the beans. 114 252

McGee (p. 207) noted the viznaga cactus, Echinocistus, as rare in the Seri habitat, presumably owing to its use for water by the natives. I made the same observation on the mainland, but Sr. Thomson stated that along the roads the plant is being gathered for candying. 114 137

The one basket described by McGee (p. 208, fig. 24) is bundle-coiled and plain. The only one I saw in use among the Seri was ornamented with a plain reddish band. Sr. Thomson presented me with two which bear patterns (fig. 13), and showed me a photograph of a collection made by Mr. Davis for the Museum of the American Indian, Heye Foundation, nearly all of which were decorated, some fairly elaborately. Several of these are shown by courtesy of that institution in figure 12. As McGee observes, there is obvious resemblance to Southwestern baskets; especially of the Papago, Pima, and Apache. Southern California basketry is less similar. That of Baja California is unknown from specimens, though the mention of water-tight vessels used for winnowing and parching suggests a coiled tray of Seri type. The surviving tribes of Sonora other than the Seri use few baskets distinguishable from those of the non-Indian population. 114 285 [171]

5:Dawson N-5 (1940) 1944 . NU31 Seri NU31

DESERT
PLANT LIFE

SIXTEENTH YEAR NUMBER 9

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SOME ETHNOBOTANICAL NOTES ON THE SERI INDIANS

105 121 If the natural resources of a region may be said to reflect the degree of cultural and social development of its aboriginal people, we may easily understand why the Seris of Sonora, now approaching extinction and with much modified habits and culture, are considered the most primitive and savage of American Indians. Certainly the arid coast of Sonora, destitute [133] of water but for a few widely separated, stagnant holes, with a dry, rocky soil habitable only by the most frugal and thorny of desert vegetation, presents little in the way of resources to a native people. It was, indeed, [242] only along the ocean shore that the Seris found animal food sufficient to sustain them, principally, the sea turtle and the pelican. This food source proved adequate to support a tribe of some 2000 in pre-Columbian times, but the limited habitat of the pelican and turtle brought about extreme isolation of the people. Thirty-mile-long Tiburon Island became their principal home, separated from the mainland by the narrow but tempestuous channel, El Infiernillo, across which they frequently voyaged in their buoyant balsas to search out vegetal supplements to their monotonous sea food diet. It is this use of vegetable materials, not only as food but in other phases of the domestic economy of these people in earlier times, with which these notes are particularly concerned.

225 Primary occupation of the Seris aside from their continual movement to and from the water holes was, necessarily, their search for food, for they cultivated nothing and conserved little. Fish were exceedingly abundant in the waters around their island, but their very limited tool sense, pro- [228] viding them with almost no fishing devices, excluded much of this food from their diet. Clams and other shellfish were to be had, but it was the abundant green sea turtle, feeding upon luxuriant growths of marine grass, *Ruppia maritima*, in the shallow, sandy lagoons along El Infiernillo, that provided their meat staple. The turtles could be captured with ease during egg laying season as they crawled over the beach, but at other times they had to be 396 speared from a watercraft. No sizable timber grows in Seriland and before the advent of flotsam boards and hoop-iron it would have strained the